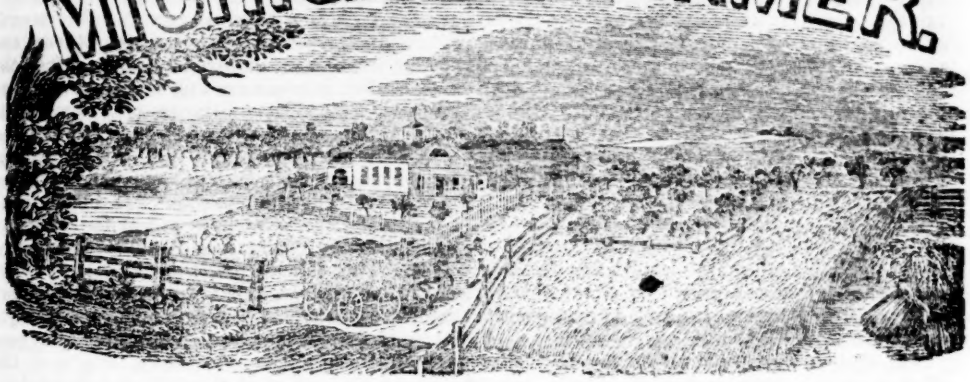
MICHIGAN FARMER.



DEVOTED TO

AGRICULTURE, HORTICULTURE, AND RURAL AND DOMESTIC ECONOMY.

Volume IV. Jackson, February, 1847. Number 11.

PUBLISHED MONTHLY.

H. HURLBUT, EDITOR.

[For Terms see last page.]

Agriculture in Germany.

[We take pleasure in presenting to our readers the following interesting letter, from a gentleman recently and for several years a resident of Michigan, who is now in Europe, descriptive of some of the peculiarities of farming in one of the German States.]

WEILBACHER SCHWEFELBRUNEN, Dutchy of Nassau, Germany, Nov. 16, '46.

TO THE EDITOR OF THE MICHIGAN FARMER:

My dear Sir,—When I had the pleasure of seeing you in Jackson in the summer, I believe that I promised to inform you of any thing interesting as regards agriculture which I might consider worth noticing during my proposed tour in Europe. Hitherto I have been too much occupied to write many letters; but having now a day of leisure, I perhaps cannot do better than give you an account of the mode of farming which is practiced in this country, where I have been spending a few weeks. In most respects, the knowledge and application of agricultural principles here, appear to be far behind those of our Michigan farmers; but there are a few particulars worthy of notice, by attention to which, even *they* may improve.

The Dutchy of Nassau, comprising one of the smaller German States, is bounded on the north by Rhenish Prussia; on the west by the Rhine; on the south by the Main, and on the east by two or three small dukedoms: and contains eighty-two square geographical miles. So far as I can ascertain, the climate is very similar to that of Michigan. The face of the country is generally mountainous, broken, and covered with forest; if we except the extreme south, where a plain, extending for twenty-five miles, from Mayence to Frankfort, and about ten miles in depth, resembling in appearance the flat prairies of Illinois, is wholly appropriated to cultivation. The population in 1842 was 370,000; of which nearly 40,000 were landed proprietors; about 2,000 were employed in cultivating grape vines, and 8,000 in iron works. Some of the most celebrated vineyards of the Rhine, such as Johannisberg,* Assmanhausen, Rudesheim, Hochheim, &c., are found in this State. Valuable mineral springs every where abound. We will confine ourselves to the southern plain just mentioned, till it is lost in the Taurus mountains.

The soil is very uniform, being a stiff, sandy yellow clay, of considerable depth, resting on gravel and magnesian limestone, the latter appearing on the surface in one or two localities. There is a sufficient gradual inclination towards the river, to prevent the water lying on the ground to any great extent; and the country may be characterized as decidedly dry. A good railroad, and a finely Macadamized turnpike, intersect the plain from Frankfort to the Rhine, opposite Mayence, and thence to Wiesbaden; while the country roads are well graded and ditched, being kept in repair with coarse gravel and small boulders. By nature, the soil is far from being fertile; it is deficient in vegetable matter; and the mode of cultivation is not such as would improve it. Neither hedges, fences, nor farm houses, with here and there a solitary exception, are in existence. The boundaries of the various farms are only known by small stones inserted occasionally along the lines; while the proprietors and peasants live in compact villages of 300 to 500 inhabitants each, which are plentifully scattered over the face of the country. Apple, pear, and walnut trees are not uncommon, occasionally planted as orchards; but more com-

* It is said that Prince Metternich, the proprietor, has been offered, and has refused 650,000 francs, for this year's produce of this vineyard.

monly forming an avenue along each side of the road. The want of all fences gives a very peculiar appearance to the country; and as a matter of course horses and cattle grazing at large are never seen. As far as I can ascertain, the land is generally worked "*on shares;*" a peasant renting just as much as he can personally attend to, and paying his rent in produce: and as the land is ploughed in small strips of 20 to 25 feet in width, and from 10 to 100 rods in length, each strip having some different crop, the whole, at first sight, looks more like the borders of an immense garden, than like farms. The wages of an able-bodied agricultural laborer are about 75 cents a week; while a great deal of the out door work, even to ploughing, is done by women at a still lower rate.

The system of cultivating only small patches of each crop, is certainly disadvantageous in two respects:—1st. Much time is lost in so frequently turning; and, 2d. The land can only be ploughed in one direction: probably, from time immemorial, the plough has never crossed the old ridges, so that the same soil is each year allowed to exhaust itself, till little power or fertility are left. The ploughs themselves are of the most ancient fashion. A natural crotch forms the handles, two pieces of stout scantling the beam and working part; a piece of board, which can be moved to either side, the share; and a colter the only cutting part; except occasionally, a curved iron plate about 14 inches wide and half an inch in thickness, extending from the beam to the earth is used instead: the end of the beam rests on a small axle and wheels to which the cattle are attached. Occasionally a pair of poor horses; sometimes a yoke of half-starved oxen; but *generally* a pair of very diminutive cows, form the motive power of this machine. The cattle are not *yoked*, but have each a stout stick tied across the horns to which the trace chains or ropes are attached, precisely in the same manner, as not very many years since, might be seen on the French farms on the Detroit river. The mode of ploughing is not that of *lands*, but backwards and forwards, each furrow turning upon the last one. For this purpose the share is changed at each end of the portion of land under work. The plough penetrates from 2 to 3 inches in depth; and with the *colter plough* the furrow is about 4 inches in width; with the other plough as wide as the iron plate. The execution, however, is of the most admirable character. The furrows are as straight, even, and regular as if laid out by line; and many a Michigan field after being well dragged is neither so smooth nor so thoroughly pulverized. Grass fields do not exist. Small patches of lucerne or clover, mixed with coarse and inferior natural grasses, and yielding very poorly, are interspersed with the plough land; but there does not appear to be any permanent grass whatever.

The crops of last season were principally *green fallows*, comprising potatoes in *rows*, not *hills;* various kinds of turneps, the commonest of which resemble a huge red radish; mangel wurzel; some hemp, and rye, which in the shape of sour black bread forms the chief food of the population; with less wheat. The potatoe crop was free from rot, and considered good; but not averaging, I should judge, 100 bushels to the acre. The turneps are inferior in quantity and quality; and the land is allowed to remain full of weeds till they are well grown, when the weeds and smaller turneps are gathered by hand to feed the cows. The potatoes are dug with a heavy two pronged hoe, and left on the ground to dry, while the tops are carefully gathered up, tied in bundles, and carried to the manure heap. The turneps are topped, and such as are not wanted during winter, are buried in pits about 6 feet deep, with a bunch of straw stretching out of the earth for the purpose of ventilation. The tops go to the cows. This fall a greater breadth of rye and wheat has been sown, but still in the same small patches. The process is very simple—one ploughing with the broad plough; *occasionally* a very light dragging; the seed cast the length of the land; one ploughing in the same direction as the former, with the colter plough, to cover the seed; another cast of seed and so on till all is completed.

The farmers here however deserve great credit for, and might well be imitated in the care with which they save and make manure. Each house is furnished with a pit, varying in length and breadth, but about 4 feet deep, walled in and water-proof at the bottom, in which every thing that can form manure is sedulously preserved. The horses and cattle being all kept in stables, there is of course no waste; the liquid manure is carefully conducted to the pit; and various means are used to trample the straw into it. When there is too much liquid it is pumped into a barrel, on a cart, and poured on the land. The solid manure is generally used long and unrotted; and frequently after being spread becomes quite dry; but a very large quantity is used to the acre; it is laid on the ground very evenly and thickly by means of a three-pronged fork; and then ploughed in and covered much better than I should have supposed could be done by such inferior ploughs.

Fall ploughing appears to be the universal practice as a preparative for spring crops. The cattle, as might be expected from the mode in which they are fed, are of the poorest and most diminutive description. The best oxen are scarcely larger than an ordinary Michigan cow: while the cows do not surpass your two year old heifers:—bony, dispirited, heart-broken creatures they appear to be, as, at a funeral pace, they drag the ploughs and wagons; being expected to sustain the double labor of beasts of burden, and suppliers of milk and butter. The horses, though much larger, indeed generally above ordinary height, fall in other respects, far below those of the United States. A week since I attended the annual cattle fair at Hochheim. About 200 horses, and 250 head of horn cattle were on the ground; and out of the whole, there were not half a dozen of either sort, that would for a moment have been looked at by one of your farmers, while a large proportion seemed only fit for the tanyard. As I said, the cattle are kept entirely in stables; except occasionally in summer, a cow with a rope round its horns, and held by a woman may be seen on a patch of lucerne. In the morning, a woman, sometimes, with a short scythe, but much more generally with a reaping hook, cuts as much lucerne, clover, and weeds as are

necessary for the day, ties them in a bundle, and on her head carries them to the stable. In winter, straw and turneps serve instead, the horses being indulged with a little coarse hay besides. A few flocks of long-wooled, long-legged sheep may be seen, under the care of a shepherd and two or three large rough dogs, roving from clover patch to clover patch, and striving to get a bite of the other crops as they pass. The shepherd is supplied with a long pole, at one end of which is a large metal spoon: with this he takes up clods and pieces of earth to throw at the sheep when they are not going in the desired direction, hitting them with most commendable skill.—When the crops are off the ground, the sheep are every night penned on the fallow, in hurdle pens, moved daily so as by degrees to occupy, and thus to manure the whole patch. To carry these hurdles a peculiar covered wagon is used, which is left in the field. The sheep are not let out to feed, till the dews are off the ground. With such feeding all the meat is necessarily of a very coarse, stringy, and tasteless description. Hogs, when kept, are confined to warm covered houses, and are fed on slops; though they are sometimes indulged, in fine weather, with a run in the open air, under the care of two or three boys. In shape and in the excellency of their pork, they very much resemble the breed of "*Land alligators*" which I remember to have been frequent, in former days, in your county.

The vineyards, from which is derived so much of the wealth of this Dutchy, are apt to disappoint as regards appearance. At a little distance they might well be taken for fields of dwarf pole beans, and are entirely devoid of anything like beauty or picturesque effect. The nature of the soil on which the grape vines are planted appears to be immaterial; if a hill side with a southern or south-western aspect can be procured. Thus the best wines are made on the almost perpendicular and rocky banks of the Rhine, as at Johannesberg, where earth is scarcely to be procured, and where, in many places, it is necessary to terrace with stone walls to prevent the meager soil from being washed away. Great ingenuity and labor are often apparent in such positions. Other vineyards are merely on naturally sloping hills, as those of Hochheim, Wicker, &c. The vines are planted about two feet apart; are not allowed to grow above four feet high; and, during the spring and summer, are tied and trained to stiff poles. When pruned they are cut to within a few inches of the ground. The object of such low training is to procure sufficient reflected heat from the soil, to mature the fruit. If the vines are allowed to grow higher, a very different and inferior wine is produced. Occasionally, round the edges of a vineyard, trellises are used, to serve as a fence, when the plant is trained as in the United States, but still kept low. A great deal of labor is requisite in a vineyard. Manure is said to injure the wine, and therefore I believe is never used; but the soil is frequently worked during the season to the depth of a foot, by means of a heavy two-pronged hoe, and all weeds are carefully destroyed. At the vintage; which does not take place till the grapes are *dead ripe*, the clusters are cut with a small strong hook, resembling a reaping hook in miniature; and the juice is expressed, in large vineyards, by means of machinery; in smaller ones, in a tub perforated at the bottom, placed on another tub, by means of a mashing stick.

The peasantry appear to be extremely comfortable. They are a quiet, well behaved, laborious, economical people; and on what appears to us to be extremely slender means, they not only are contented, but look well, dress well, and make themselves happy. At the Fair at Hochheim at least 1000 of them were congregated in their holiday clothes; and a more respectably dressed assemblage of persons, in the same class of society, few countries, except the United States, could present—the women in their gay woollen costumes, were clean, neat, and well protected against the weather; and the men, with but few exceptions, were provided with heavy broadcloth cloak-coats; while the general aspect was one of happiness, sufficiency, and self-respect. Intoxication is rarely or never witnessed; which however is said to be the universal case among the peasantry in wine-growing countries.

I have already exceeded the usual limits of a letter, and must therefore hasten to subscribe myself, Very sincerely yours,

CHARLES FOX.

For the Michigan Farmer.

Peach Trees.

REASONS OFFERED FOR THEIR DIFFERENT PRODUCTIVRNESS IN DIFFERENT LOCALITIES—SUGGESTIONS FOR PLANTING.

"From some cause," remarks your correspondent at Ann Arbor, "peach trees did not the past season uniformly produce a full supply of fruit." The reverse of this was the fact in Oakland Co. The crop was most abundant, I believe, in every location, where the peach thrives. But this uniformity, has not always prevailed; for there have been seasons, when the trees in some yards have been loaded with fruit, while the trees in others near by, have produced none. The reason for this has been made a subject of inquiry and observation by me, for some ten years past; and I give the following as the result.

And 1st. There are certain locations, where the peach tree produces fruit as uniformly as the apple or plum.

2d. There are other locations, where they seldom produce fruit.

3d. The cause for this cannot, I think, be attributed to the difference in soil; for I have in my eye two yards in my immediate vicinity, the one a light sand, and the other, a stiff clay, where the peach trees are often loaded with fruit, when there is none to be found in yards at a short distance from them.

4th. Fruit buds appear as abundant in one location, as in the other.

5th. The fruit buds, are often killed in one location, when they are not in the other.

6th. There is great uniformity respecting the two last particulars,—they are not casual.

And 7th. Good, bad, or indifferent culture, appears not to be the cause of this discrepancy.

What then is the cause? The reasons I shall assign, may not be as satisfactory to others, as they are to myself, but as cultivators of the peach

may derive hints, by which they may profit, I will, though with diffidence I confess, lay them before your readers with your consent.

The reason why the peach does not uniformly produce fruit in those locations to which I have alluded, is not, as has been intimated, for the want of fruit buds, but because they are killed by the frosts of winter or spring. The simple inquiry then is, why are the fruit buds killed in some locations, and not in others that are contiguous, where the aspect seems to be much alike? It is a fact well known that frosts never occur in the spring, when it is cloudy, or when the wind is high. All, too, are familiar with the different currents of air felt in a cold evening, succeeding a warm day: the one as soft as a summer's breeze, and the other as cold as the blasts of winter.—The heat generated by the sun during the day ascends, and the cold air descends; hence these different currents of air, and hence too, the reason why frosts are often severer in the valleys and low grounds, than they are on the higher grounds with which they are surrounded;—vines and succulent plants, being often killed in the former places, when no traces of frost can be discovered in the latter. This often occurs in yards of very small dimensions.

Again, portions of vines are killed in the same plat, and grape vines upon the same trellis, while here and there a plant, or a bunch, will escape and appear as fresh, as if Jack had not entered the enclosure. Sometimes the foliage upon the lower branches of trees is nipped, when the upper ones escape. All these have not unfrequently occurred in my own yards.

It is but a year or two since, that the foliage of the locust was killed by the frost. Having some thousand trees standing in rows, about three feet apart, I discovered here and there a tree, that had entirely escaped the frost, the foliage of which was perfectly fresh, while that of the others was dry. I have locusts in my fruit yard, whose leaves were all killed by the frost, to the height of some 8 or 10 feet from the ground, while not a leaf was touched in the branches above. In 1845, from an orchard of some 150 trees, all the fruit I gathered, with the exception of here and there a solitary apple, I took from a single branch, upon the north side of one of my trees,—this was loaded with fruit. There are then these two causes—air and heat—either of which, if sufficiently powerful, will dispel, or rather prevent the frost from affecting those trees that are subject to their influence. The same cause that protected the upper branches of the locusts in my yard, would also have protected the fruit buds of the peach, in a yard equally elevated. So would the same cause that protected a portion, have protected all of the locusts in the nursery rows, had they alike been brought under its influence.

What then were the causes? The answer has been given—heat and air. In the first instance, the temperature at the height of ten feet was increased by the caloric that had escaped from the grounds below; and the temperature of the latter diminished by the heat that had been generated by the sun during the day having been displaced by the cold air rushing in from the higher regions. And in the second instance, a portion of the trees were protected, by being brought under the influence of these currents of air to which allusion has been made. If I have been so fortunate as to assign the true causes of the freaks of Jack Frost, it will not be difficult to explain the reason why the peach is fruitful in one location, and not in another. It is hardly necessary to remark that the fruit buds of the peach are more liable to be affected by the frost, than other kinds of fruit, (the Apricot excepted.)—Hence nature seems to have provided for this casualty, by furnishing a large amount of fruit buds; so that if one-half, or even two-thirds of them perish, enough will remain to produce an abundant crop. Some yards being elevated, are brought under the influence of a mild temperature, others may be so located as to be subject to a draft, or current, of air, produced by the peculiar location of surrounding buildings, board fences, trees or hills. Trees thus situated, would be less likely to be affected by frost, than those that are more exposed to its influence.

If, in the opinion of any of your readers, I have failed to indicate the causes that so often disappoint the fond hopes of those who cultivate the peach, I hope they will give us their opinion. In the mean time, bear in mind that the facts are nevertheless true, and let them take the following hint. Before setting out their trees, let them first ascertain what portions of their grounds are the least affected by frosts. This may be done by planting potatoes, or vines, in different parts, and let them plant their trees on that spot, be it more or less remote from their dwelling. I know a yard not many miles distant from me, where the owner has several peach trees, standing in the place where he first erected his log cabin, that yield him an abundance of fruit, when the trees standing near his present dwelling, some half a mile distant, yield him none. H. C.

For the Michigan Farmer.

How to fatten Hogs.

MR. EDITOR:—

Having been so taught by the examples of others, I have till within a short time, believed that when hogs are to be fattened on potatoes and corn, the potatoes should first be fed out, and the corn last; supposing of course, as many do, that, from a given amount of feed, fed out in accordance with this system, the quantity of pork will not only be quite as great, but of a better quality, and also made in as little time. This season, however, the discontentment manifested by my hogs, after having been fed some 14 or 15 days exclusively on potatoes, which I attributed to a too great sameness of food, induced me to discard the old system, and to try a change or mixture of feed, composed of corn and potatoes, which was accordingly done. In feeding, I generally gave both corn and potatoes, so that the meal was composed of about one-half of each; sometimes, a full meal of one or the other; but never did 24 hours pass without their receiving both. With reference to the effect which this system of feeding had upon my hogs, I would say that it more than met my most sanguine expectations—they ate their food more heartily; were more contented; kept stiller; took on fat much faster; and the pork, for aught I know, was as good as any I

ever saw. Inasmuch as we are all anxious to be put right upon this subject, to-wit: fattening hogs, I would say then, in conclusion, that, in fattening hogs, my experience, reading, and reflection have fully satisfied me that it is advisable to observe the following rules:

1. Let the changes of feed be as frequent as circumstances will admit of.

2. Let the times of feeding be regular.

3. Let the sty be so constructed of boards and planks that they can neither see surrounding objects to attract their attention, nor get to the ground so as to spend much time and labor in rooting.

4. Let them always have a sufficient quantity of straw that is clean and dry, on which to sleep; and,

5. Let their food be so prepared as to require the least possible time for mastication, and secure the greatest facility of digestion: and, my word for it, you will not only ensure to your hogs good appetites, comfort, contentment and a rapid, fattening growth, but what, to most persons, is still more satisfactory, a liberal quantity of *first rate pork*.

A. Williams.

Otisco, January 20th, 1847.

For the Michigan Farmer.

Mulching.

Trees that are transplanted in the spring of the year are often injuriously affected by the drought. A remedy for this may be found by covering the ground around the trees, after they are set, somewhat farther than the roots extend, with coarse, unrotted, barnyard or chip manure to the depth of three or four inches. The latter I have generally used, and have set my trees some four inches lower than they originally stood, and have filled the hole with earth to within four inches of the surface, and the remainder of the hole with chip manure, (the coarser the better,) and packed it close. After this has been done, I have poured water upon it, till the ground was thoroughly saturated. This may be repeated as often as necessary, without fear of the ground baking; but this will not be necessary, unless the drought is extreme. I have seldom lost a tree when properly mulched.

Horticulturist.

For the Michigan Farmer.

A cheap and warm shelter for Sheep.

Mr. Editor:

It appears to be generally conceded as desirable to afford comfortable shelter to all our domestic animals, and perhaps to none is this more necessary than to sheep. But the cost of erecting sheep barns, as recommended by some, is so great, that most of us western farmers lack the means to make such provision. Even the construction of frame sheds is attended with considerable expense, while those temporary sheds with a covering too thin to keep the rain from dripping through, are poor concerns at the best. The past season I have made use of a simple expedient which has worked so finely, that I am led to mention it to my brother farmers through the medium of your paper.

Near my wheat stacks, I drove into the ground six crotches, about three feet high when driven in. These were placed in two rows about 18 feet apart, and were about 15 feet from each other in the row, thus making the commencement of a kind of shed some 30 by 18 feet. On these crotches lengthwise were placed substantial poles, and these last were covered with cross poles, supported by stakes in the middle so as to form a roof strong enough to sustain a heavy weight. This was the amount of my preparations—the labor of something like a day.

When the wheat came to be threshed, I caused the straw to be thrown over my structure, so as to bury it up completely, and a stack of moderate height was made over it. As the fall advanced, and sheep began to require fodder and shelter, I cleared away the straw from one side, so as to give access to the interior, and turned my sheep to it. They soon found their way in, and that has been their favorite quarters ever since—attracted, probably, in part by the warmth and comfort of such a place, and partly by having always the straw to nibble at. They have now eaten a considerable part of the straw, having made themselves passage ways through the exterior of the stack in various directions. They have kept in fine condition, and consumed much less hay than usual.

The space beneath the stack is now large enough to hold two or three hundred sheep. The shelter is still a warm one, and, of course, at all times perfectly dry.

A Farmer of Jackson County.

January 15th, 1847.

[If the following statements are correct, they should be made known;—if not, Mr. Prince shall have an opportunity of vindicating himself before the public.—Ed.]

For the Michigan Farmer.

Wm. R. Prince & Co., and their Nursery.

From the last No. of the Farmer it is quite evident that some of your readers are beginning to think and talk about fruits and fruit trees; and doubtless the time is near when many others will not only think and talk, but will actually try to procure them. Hence it is supposed that almost any thing which may be said on the subject will to a greater or less degree interest some of your readers; and as the Farmer has heretofore published a notice of Prince's Linnæan Botanic Garden and Nurseries, at Flushing, L. I., perhaps it will not be improper at this time for it to tell its readers of some of the doings of this establishment. For this (so called great original) establishment the pre-eminence is claimed, and from an examination of their Catalogues it would really seem that here is the place above all others, and on all accounts, to obtain either fruit or ornamental trees. Especially is it likely to appear so to such as wish to purchase by the quantity, and are anxious to obtain many of the choicest varieties known. But from a little experience I am led to conclude that one cannot always be quite certain of obtaining precisely such as may be desired even here, where appearances are so very favorable; and for the benefit of such as it may concern, it

is proposed to state some facts relative to this matter.

Some time in Feb., 1846, a selection from their catalogue of 1844–5 of such varieties as were wanted was made and forwarded to Wm. R. Prince & Co., with a request that if there were any varieties named in such selection which they could not furnish they would state which they were: to which it was promptly replied that for the cash they would furnish any of the varieties found in their General Catalogue. Accordingly an order with the cash was forwarded. Among the most important articles ordered, there were 60 pear trees, of which there were sent 29; 34 parcels of plum scions, of which there were 21 sent; also 23 parcels of apple scions, and there were sent 6 parcels. Several other important articles were ordered, but were not sent. If it should be asked how the deficiency was made up, it would be replied:

1st. By sending things which were not ordered. There were ordered 1 doz. American Arbor Vitæ of that size which were priced 6 cts.; but there were sent 2 doz. of those priced 20 cts.—making a difference of some $4: also of Althea Frutex $4 worth, and there were sent $6.77: also of Laburnums $2, and there were sent $6 worth.

2d. The deficiency was further made up by extra charges, as follows: The pear trees were of that size which, in a private wholesale catalogue which had just been received, were priced $30 per 100; but the charge was at the rate of something more than $37 per 100. Again, in their general catalogue, page 49, it is said, "Scions of all kinds of fruit trees suitable for grafting, will be supplied at 25 cts. per parcel;" but the charges were from 25 cts. to $1 per parcel, and at this last named sum there was charged for 2 parcels of one variety. Now it will be remembered that these parcels were not dozens, but parcels real, although not excessively large, yet containing 1, 2, and 3, and perhaps in some cases of the most common varieties as many as 4 or 5 scions each. Again, there was sent 1 Rose Remarquable, charged $1.87: catalogue price is 62 cts. 1 Rose Plantier, (Hybrid Noisette,) catalogue price $1, but charged $3: another Rose Triumphant, price 37 cts., but charged $1.12.

But once more, and lastly, the deficiency was further and fully made up by retaining a part of the cash.

Now while it is presumed that to some of the readers of the Farmer these allegations will not be essentially new, it is believed that they will be quite so to many others. Some of the statements concerning the amount of certain articles ordered are made from memory. It is not therefore pretended that each and every one of them is infallibly correct. But as it is presumed Wm. R. Prince & Co. have my order in their possession, and as a copy of this article will be forwarded to them forthwith, they can compare these statements with said order, and if they do not correspond, they can forward said order to the Editor of the Michigan Farmer, who is hereby authorized and requested to correct all errors which may be found, and publish such correction in the next number of the paper.

DANIEL COOK.

Jackson, Jan. 11th, 1847.

For the Michigan Farmer.

Sheep Housing.

MR. HURLBUT:

As myself with others are called upon in the last number of the Farmer to give the result of our experience in housing sheep, &c., I have concluded to answer for myself by stating that as an evidence of success, and entire satisfaction in the system so far, has been a constant increase in the number housed each succeeding winter; and also as further evidence that I have been so far successful I will state, that out of about four hundred kept last winter, my loss was less than half a dozen during the entire foddering season. I will produce one more witness, and submit the case. Last season I let two hundred sheep, and the understanding was that they should be housed during winter.

Respectfully yours,

G. J. BARKER.

Manchester, Jan. 15th, 1847.

For the Michigan Farmer.

MR. HURLBUT:

Your correspondent, D. S. Denton, calls for information as to my success in keeping sheep. He probably refers to my "plan" of providing shelter, not "close confinement," communicated some time since. I will only say that I still pursue that "plan," and with what success the following facts will show. Of four hundred sheep at home, I lost four during eighteen months past, and those by accident. One hundred and eighty of my best ewes sheared three and a half lbs. per head, and buck Maximum, eight lbs. five oz.—all sold for 31 cts. per pound, cash.

T. L. SPAFFORD.

Manchester, January 19th, 1847.

Constant Miracles.

There is an eastern story, of a boy having challenged his teacher to prove to him the existence of a God by working a miracle. The teacher, who was a priest, procured a large vessel filled with earth, in which he deposited a kernel, in the boy's presence, and bade him pay attention. In the place where the kernel was put, a green shoot appeared, the shoot became a stem, the stem put forth leaves and branches, which soon spread over the whole apartment. It then budded with blossoms, which, dropping off, left golden fruits in their place, and in the short space of an hour there appeared a noble tree in the place of the little seed. The youth overcome with amazement, exclaimed, "Now I know there is a God, for I have seen his power!" The priest smiled at him and said, "Simple child, do you only now believe? Does not what you have just seen take place in innumerable instances, year after year, only by a slower process? But is it the less marvellous on that account?"

Cold Water Gingerbread.

Take a tumblerful of molasses; half a tumblerful of cold water, dissolve an even tablespoonful of saleratus in it; two tumblersful of flour; a tablespoonful of ginger, and a piece of butter as large as an egg. Stir them well together and bake quick. It is best when warm. ELLA.

[We publish a few passages from a communication written by one we never had the pleasure of seeing, with the intention of giving us, or rather the Michigan Farmer, some friendly aid.—The writer will excuse us for omitting those portions in which he speaks of the merits of this journal, and his appreciation of the efforts of its conductor,—because, however gratifying such notices to us personally, the public have seen and read, and will judge each for himself.]

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For the Michigan Farmer.

To the Patrons of the Farmer.

I take the liberty to address this communication to you without any previous consultation with the editor and proprietor, the object of which is to advance the interests of the only paper published in this State devoted exclusively to the interests of the agriculturist, and offer a few reasons why we should be interested in its publication.

The State of Michigan is destined to rank among her sister States far above mediocrity.—Already does she export her millions of bushels of wheat, which is conclusive evidence that she is a great wheat-growing State. Besides supplying her own manufactories which are rapidly increasing, with wool, she exports a large amount. The various articles of provisions form another important item in her bill of exports. When her uncultivated forests yield to the enterprise of her fast increasing population, the amount may be increased ten fold and more.

A consideration of the above facts will convince the most skeptical that an agricultural paper is needed to enable the farmers of Michigan to keep pace with the spirit and the improvements of the age. Agriculture, like all sciences, is progressive. * * *

[Alluding to an increase of the subscription list to an extent somewhat commensurate with the numbers of that class for whom the paper is designed, the writer says:—]

If this is done the farmers must do it. It is *your* paper, and especially designed for *your benefit.* To accomplish this, let the spirit of the farmers of Michigan be aroused: let this be known by their works. Go to your neighbors and solicit their subscription for the paper with advance payment. If each one will act his part, before the end of the present volume several thousand new subscribers might be obtained, with no expense and very little trouble. To obtain the same number would cost the proprietor the expense of several travelling agents, which would amount to several hundred dollars. The sum saved, I will venture to assure you, would be expended to enrich the columns of the Farmer. Friend Hurlbut has already given intimations that the next volume will be increased in size. Hold up his hands, and give him a New-Year's gift of five thousand new subscribers to begin the next volume with, and Michigan will have an agricultural paper worthy of a great and growing State.

Dec. 28th, 1846. S. B. Noble.

For the Michigan Farmer.

Friend Hurlbut:

I would like to tell the readers of the Farmer how very simply and easily my wife makes most excellent apple dumplings and muffins, viz: for

APPLE DUMPLINGS,

Take flour sufficient for the number you wish to make, add a little salt, and pour on boiling water sufficient to make it into dough. Roll the crust out pretty thin, say one-fourth to three-eighths of an inch, enclose the apples, and boil in the usual way, being careful to take them out as soon as cooked; then with time and *a suitable invitation* I should like to *oversee* the *concluding operation* myself.

FOR MUFFINS,

To a quart of warm milk add a little salt and two spoonfuls of yeast, mix your flour in as thick as you well can, and beat it until it drops from the spoon. It will generally take from four to six hours to rise, and is best baked on a griddle in tin rings about four inches in diameter, and one inch deep: fill them about half full and turn as with other cakes. Open and butter while hot. An egg or two would improve them for some palates. J. Gibbons.

Raisin, 1st Mo. 10th, 1847.

The Wood of the Locust Tree.

The following notes relative to the duration of the locust wood [*Robinia pseudo acacia,*] have been made by M. Pepin, Jardin du Roi, Paris:—A number of trees were felled that had been planted from 40 to 50 years; but not more than one to five of those wheelwrights who came to purchase, appreciated sufficiently the locust, the others preferring elm. Ultimately the locust was sold to the persons who knew its value, at one-third higher price than the elm. The purchasers found that spokes made of the wood in question lasted two sets of felloes, and were likely to answer for a third. Under equal circumstances of wear and tear spokes made of locust wood were perfectly sound, while those of oak required to be replaced. M. Pepin further states that the ends of locust gate posts which had been in the soil for upwards of forty years were still not decayed. This sort of wood employed as feet or supports to chests made of oak, proved sound, although the oak plank in contact with them had been thrice renewed; but oak supports decayed simultaneously with the oak planks composing the chests. Vine props of locust wood are greatly esteemed.—*Scientific American.*

Quince.

There is a variety called Pyrus Japanica or Japan Quince, which is cultivated simply as an ornamental shrub. It is more dwarfish than the other varieties. It has scarlet blossoms, is extremely showy and beautiful, and no yard should be without it. It is perfectly hardy. H.

Inquiry.

Will you, or some of your correspondents, inform me through the columns of your paper of the best way, if there be any way at all, of killing the milk weed, aside from that of summer-fallowing? Tyro.

MICHIGAN FARMER.

JACKSON, FEBRUARY, 1847.

The next Volume.

Our readers will notice by reference to the Prospectus on the last page, that important changes are to be made in the publication of the Farmer, of a character highly advantageous to subscribers. The Editor will be associated in the publication of the ensuing volume with the proprietor of the Detroit Daily Advertiser. Aside from the improvement in size and appearance, the aid of additional contributors is expected; and the services of an engraver who resides in Detroit, will be had whenever desirable. As the paper will be published in Detroit, and issued twice a month at the season when farmers are disposing of the greatest amount of their products, the market intelligence, which will be carefully collected, will not be without its value. We think we hazard nothing in assuring the public, that the next volume will surpass, both in beauty and value, any of its predecessors.

Subscribers who are still in arrears will, it is hoped, now appreciate the necessity of having all accounts paid before the expiration of the present volume. We wish to begin with clean books, and in order to avoid all necessity for the repetition of such notices, unpleasant alike to writer and reader, the publishers are desirous that the next volume shall be issued on the principle of *exclusively advance pay*. This arrangement will, it is believed, be better for all parties.

☞ We invite attention to the very low club terms, and the liberal premiums offered.

The Flour Market.—On the 26th and 27th ult. Michigan and Genesee flour was selling at $6.87½ to $7.00 in the city of New York. At these prices, and with the usual rates of transportation, it is easily seen that wheat is worth in this and other markets similarly situated, fully $1 a bushel. All that the farmer actually gets is 50 cents, or a trifle upwards. What are the causes of this unfortunate depression?

The length of time before the opening of navigation, the uncertainty of the spring market, and the disappointment experienced last year both by wheat buyers and farmers who kept back their produce, are doubtless among the prominent reasons for this state of things. Added to these, is an alleged scarcity of money for investment, and the fact that many farmers have been obliged to sell, at whatever rate, to meet taxes and other demands.

It would be hazardous to attempt to predict the state of the spring market. All we can say is, that according to present advices, the destitution of provisions in Great Britain and Ireland is very great, amounting in many districts to absolute famine; and would seem to make probable a continued active demand from this country.

Report of the Superintendent of Public Instruction for 1846–7.—From this document it appears that the indefatigable officer at the head of the department of Public Instruction has, within the past year, visited and held educational meetings in every organized county in the state, except four. In most of the counties visited, Educational Societies were formed, whose especial object is the improvement of Common Schools. Nearly 30,000 children have been taught in these "Peoples' Colleges," the past year. The whole number in the State between the ages of four and eighteen is 97,658.

We are glad to notice in the list of books recommended for use in Primary Schools, that "Johnston's Agricultural Chemistry and Geology" holds the first place among the text books on Chemistry. We presume the "*Catechism* of Ag. Chemistry and Geology" is intended. This excellent little work brings the science of which it treats down to the comprehension of the school boy, and presents it in such a manner as to interest while it instructs. In our judgment, the time required for its study, which need not exceed three months, could not be better spent by any youth who intends to become a tiller of the soil. The price of the book is 20 cents.

The Hasty Pudding: *a poem, in three cantos, written in* 1793, *by Joel Barlow; with a memoir on Maize, or Indian Corn, compiled by D. J. Browne, under the direction of the American Institute, New-York*, 1847.

A neat pamphlet with the above title has reached us, containing, besides the once popular poem of an early American poet, an elaborate treatise on Indian Corn, giving its history, analysis and uses, an account of the principal varieties, and ending with a score of recipes for its preparation for the table. It is just the thing to circulate in Great Britain, to complete the revolution in public opinion already begun, in favor of this grain. No prejudice can resist this combined attack upon the imagination, the judgment and the palate. Even among us, where the merits of Indian corn in its various culinary applications are appreciated, no one can read the enthusiastic praises which Barlow lavishes on his favorite dish,

without a yearning in the region of the stomach, and a call for "Hasty Pudding" ready to issue from his lips. See, for instance, what an affectionate interest is breathed forth in the following lines:

Dear Hasty-Pudding, what unpromis'd joy
Expands my heart, to meet thee in Savoy!
Doom'd o'er the world thro' devious paths to roam,
Each clime my country, and each house my home,
My soul is sooth'd, my cares have found an end,
I greet my long-lost, unforgotten friend.

* * * * *

Thee the soft nations round the warm Levant
Polenta call, the French, of course, *Polente;*
Ev'n in thy native regions, how I blush
To hear the Pennsylvanians call thee *Mush!*
On Hudson's banks, while men of Belgic spawn
Insult and eat thee by the name *Suppawn.*
All spurious appellations, void of truth:
I've better known thee from my earliest youth,
Thy name is *Hasty-Pudding!* thus our sires
Were wont to greet thee fuming from their fires;
And while they argu'd in thy just defence
With logic clear, they thus explain'd the sense:—
"In *haste* the boiling caldron o'er the blaze,
"Receives and cooks the ready-powder'd maize;
"In *haste* 'tis serv'd and then in equal *haste,*
"With cooling milk, we make the sweet repast.
"No carving to be done, no knife to grate
"The tender ear, and wound the stony plate;
"But the smooth spoon, just fitted to the lip,
"And taught with art the yielding mass to dip,
"By frequent journeys to the bowl well stor'd
"Performs the hasty honours of the board."
Such is thy name, significant and clear,
A name, a sound to every Yankee dear,
But most to me, whose heart and palate chaste
Preserve my pure hereditary taste.

THE N. Y. FARMER AND MECHANIC.—This useful paper has dropped the newspaper and assumed the octavo form, which with new type and additional illustrations, gives it an improved appearance. We find about two out of its sixteen pages devoted to farming, the remainder to the mechanic arts, general intelligence, advertisements, &c. It would seem easy for any man, especially any mechanic who is devoted to improvement in his calling, to derive from the weekly visits of such a paper, the value of its subscription. Terms, $2 a year in advance.

THE RURAL REGISTER AND ALMANAC FOR 1847.—This is the title of the largest Almanac of the season, being a pamphlet of some 150 pages. Besides the usual calendar, it is an "*omnium gatherum*" of many useful facts pertaining to farming, gardening, rural architecture, fruits, &c. It is well got up. Published by Lea & Blanchard, Philadelphia.

☞ The Office of the Farmer will not be removed before the conclusion of the present volume.

For the Michigan Farmer.

Inquiry about Bees, &c.

MR. HURLBUT:

I request information of the best enclosed bee-house to domicil several swarms of bees in one swarm, and the management of the bees.

I also request that you publish "The reproduction of the Potato, and a probable remedy against the potato rot," published in the October number of the Despatch. MOSES RIPLEY.

Fentonville, Genesee Co., Jan. 9, 1847.

In the Bee-palace, of which a description was given on Page 60, Vol. III, there is an arrangement by which several swarms can be united into one. We are not informed from any disinterested source, how it works practically. Nor are we prepared to say what is the *best* plan for accomplishing the proposed object. We hope to be able to give information soon. Will not some one who has tried some plan successfully communicate?

We believe, however, that the uniting of several swarms by *any* process, is not considered, by experienced bee-masters, the best and most natural method of managing the insect.

The paper mentioned as containing the article on the Potato rot, is not among our exchanges. If the article refers, as we suppose, to the reproduction of the potato from seed as a remedy, (which has been recommended in some papers,) we apprehend it would be found of little utility:—for in many cases in which the experiment has been tried, the newly produced varieties were equally affected with the old. In some others the report is favorable. It would, doubtless, be well for those who have leisure, to originate new sorts, as there is a probability of thus obtaining varieties more perfectly adapted to our soil and climate, than any imported. This is usually done by sowing the seeds obtained from the potato ball, in a well prepared garden bed, in drills far enough apart to admit of a little hilling up; dig at the usual time, and keep the produce of every seedling separate. Plant the next spring, and test the quality of the second crop, rejecting the kinds that prove inferior. The tubers of the first year's growth are from the size of a walnut to that of a hen's egg; those of the second will be nearly of full size.

☞ NO TRAVELING AGENTS will be authorized to receive subscriptions for the New Series of the Michigan Farmer, but those whose certificates bear date after February 1st, '47, and are signed "Williams & Hurlbut."

Leaves are to plants and trees, what the lungs are to animals.

A Chapter of Scraps.

Effects of Expansion.—A cannon ball, when heated, cannot be made to enter an opening, through which, when cold, it passes readily.

A glass stopper sticking fast in the neck of a bottle, may be released by surrounding the neck with a cloth taken out of warm water.

Pipes for conveying hot water, steam, hot air, &c., if of considerable length, must have joinings that allow a degree of shortening and lengthening, otherwise a change of temperature may destroy them.

Inventions.—"We have seen," says a cotemporary, "many a '*scare-crow*,' but never a 'scare fly:' but a Yankee has actually invented one, which is intended to take the place of a nurse at the bedside of the sick, or over the cradle of the sleeping infant, at that season of the year, when flies are a pest. A neat box contains a simple brass machinery, which may be wound up like a clock, and will run as long. From the lid of the box, a short tube projects, into which, (for instance,) may be thrust a peacock's feather. The machinery being wound up, a motion is produced precisely like the beat of a clock, which gives to the feather the slow and steady oscillations of a pendulum. This may be so placed as to overspread the face of the patient or sleeper,—capital, for those who like to nap it after dinner in hot weather.

Tuscan Straw Braider.—Elisha Fitzgerald, of New York City, has invented a machine that picks up straw as quietly and aptly as though it had been doing that and nothing else since the days of Adam, and is so simple in its management that a child could attend a dozen or twenty of them at a time. Having a quantity of short straws put into a receptacle, it selects one at a time, and adds it to the braid, at the same time cutting off the refuse end of the one whose place it supplies, and forms the braid with its iron fingers much better than it could ever be done by the most experienced braider, and with such speed that one machine would do more work in a day than fifteen or twenty operatives. If a straw is too large, the machine rejects it, and if by accident a straw is missed, it stops of itself.

Mites in cheese, are found by microscopic examination, to be insects with eyes, mouth and feet, and a transparent body, furnished with long hair.

Mould, which is found sticking to damp bodies, shows a thick forest of trees and plants, where the branches, leaves, flowers and fruit can clearly be distinguished.

A good hint to the Horticulturist.—To find the colors that contrast, take a sheet of white paper, and place upon it a red wafer for instance, look at it with one eye steadily for half a minute or so, without closing the eyelid, then look from the red wafer to another part of the white paper. A green spectrum will be seen of the same size of the wafer, and this is the color that would form the true contrast to red. In like manner, an orange wafer will produce a blue spectrum, &c.

Ten thousand barrels of onions are annually raised in the city of Salem and Danvers, the adjoining town, which net the growers one dollar per barrel.

To remove stains from books.—A solution of oxalic acid, citric acid, or tartaric acid, may be applied without fear of damage; these acids taking out writing ink, and not touching the printing, can be used where the margins have been written on, without attacking the text.

The most simple and effectual method of erasing spots of grease, wax, or oil, is by washing the part with ether, and placing it between white blotting paper, and ironing with a hot iron. If the stains are not bad, rectified spirits of wine will answer the purpose.

☞ A brick machine has been invented at Cincinnati, which is reported to turn out 40,000 bricks in a day.

American Apples in England.—Sound American apples, of good quality, were selling lately in Liverpool at about $3 a barrel.

Sugar.—The Indians in one of the islands of Lake Huron, are said to have made the past year over one hundred tons of maple sugar.

☞ An acre is 4840 square yards, or 69 yards, 1 foot, and 8½ inches each way. If potatoes were planted 3 ft. apart each way, there would be 4840 hills on an acre, which producing at the rate of a bushel to 20 hills, would give a product of 240 bushels. An acre of corn planted 4 feet apart each way would contain 2722 hills; if each hill were made to yield a pint of shelled corn, the product would be about 42½ bushels.

☞ The quantity of wheat and flour under lock in Great Britain on the 5th of November last, was only about one-fifth as great as at the corresponding period last year. In ten months of the present year the imports into the United Kingdom have been equal to 64,000,000 bushels, while the total imports of the four previous years were only 66,000,000. Of this last amount, the United States furnished less than one-twentieth.

A tanner at Tyman, in Hungary, completely preserves raw hydes from putrefaction, and restores those that are tainted, by applying to them with a brush a layer of pyroligneous acid. They absorb it very speedily, and it occasions no injury or diminution of their value.

POTATOES do not intermix from being planted contiguously or in the same hills. The intermixture of varieties takes place in the flower, not in the roots or tubers.

[The following valuable statistics were furnished for the Free Press by the Collector of the port of Detroit.]

Exports of Michigan.

COLLECTOR'S OFFICE, DEC. 23, 1846.

Sir,—There has been exported from the port of Detroit, for the year 1846, the following products of the growth and manufacture of this State:

	Value.
464,092 bbls. flour,	$1,624,329 00
114,397 bushels wheat,	68,640 20
5,742 casks of ashes,	100,661 50
506,143 lbs. wool,	101,222 60

100,354 lbs. leather,		15,144 10
2,920 bbls. cranberries,		4,380 00
9,305 " fish,		41,872 50
516 " grass seed,		1,548 00
100 " flax "		300 00
5 " mustard seed,		25 00
100 doz. brooms,		120 00
2,621 bbls. pork,		26,310 00
200 " beef,		1,400 00
200 " hams,		2,400 00
2,027 bushels beans,		1,519 00
3,768 " corn,		1,407 20
930 " barley,		279 00
6,462 " oats,		1,615 50
2,500 " potatoes,		312 50
17,000 bbls. assorted provisions,		85,000 00
1,302 " whiskey,		8,072 40
6,487 green and dry hides,		8,119 00
40 bbls. beeswax,		1,728 00
24 " gensing and other roots,		120 00
140 tons hay,		1,960 00
308,000 lbs. mineral ore,		
4,346,126 staves,		18,850 00
4,000,000 feet lumber,		28,000 00
10,000 shingles,		10,000 00
Furs and peltries,		300,000 00
Straw hats,		10,000 00
6,000 bbls. beer,		30,000 00
Total value exported from Detroit,		$2,495,335 50

There has also been exported in the same period of time, from the port of Monroe, Mich.

155,108 bbls. flour,	$542,878 00
372,847 bushels wheat,	190,992 90
591 tons ashes,	38,415 00
84,424 lbs. wool,	16,884 80
90,524 " hides,	2,715 72
189 bbls. pork,	1,890 00
290 bushels beans,	217 50
40 bbls. alcohol,	300 00
158 " cranberries,	237 00
75 " buckwheat flour,	225 00
4,804 bushels corn,	1,921 60
300 " barley,	112 50
1,312 lbs. beeswax,	354 24
64 doz. corn brooms,	79 80
377 bushels potatoes,	40 00
14 bbls. grass seed,	42 00
158,000 feet black walnut lumber,	1,580 00
20,000 staves,	280 00
600 bushels oats,	75 00
50 bales furs,	
All others,	1,000 00
Value of Monroe exports,	$800,241 06

Exported from the port of St. Joseph, Michigan,

263,645 bushels wheat,	$158,193 00
129,333 bbls. flour,	388,014 00
3,099 " provisions,	21,693 00
7,773 bushels corn,	2,914 88
1,500 " oats,	150 00
4,000 lbs. wool,	800 00
325 M. shingles,	325 00
100 M. staves,	1,400 00
1,500,000 feet lumber,	9,000 00
2,721 casks whiskey,	16,598 10
170 bushels beans,	126 75
781 hides,	976 25
65 casks linseed oil,	1,365 00
Total value of St. Joseph exports,	$601,555 98
Value lumber exp. at other ports,	$20,000 00
" shingles " " "	100,000 0
" all other articles,	50,475 50
	$750,475 50

RECAPITULATION.

Detroit,	$2,495,335 50
Monroe,	800,241 06
St. Joseph,	601,555 98
All others,	750,475 50
Total,	$4,647,608 04
Ton. st'm ves. enrol'd in this dis't	8,400 40-95
" sail " " "	17,917 46-95
" " licensed " "	610 40-95
Total tonnage,	26,928 31-95

Employing about 1,800 seamen in navigating them.

Respectfully yours,

S. C. Hammond,
Dep. Collector.

To destroy Bed Bugs.

Boiling water is the best and cleanest remedy, as it not only kills all that it touches, both insect and egg, but assists in hatching the eggs that are sufficiently near to be affected by the heat; these in their turn may be killed by a second application, which purifies the infested places. When the bedsteads are thoroughly cleansed with boiling water, mercurial ointment, corrosive sublimate, or common bar soap, placed in their haunts, will prevent their return. Should the walls of the rooms be infested, pieces of white rag dipped in white-wash and carefully plastered over the holes and cracks, will effectually prevent their escape; this, too, is a good method of covering cracks and breaks in plastered walls, and a coat of white-wash over the cloth, will conceal both cloth and crack. Should a room be hopelessly infested with bugs, remove the furniture, and fumigate for one or two days with brimstone; this has proved effectual when all other remedies have failed. Fall cleaning, scalding, and white-washing, is highly desirable, as it kills the mother bugs before they retire for the winter. Fall white-washing is to be recommended on many accounts, the lime being not only a great beautifier, but it is equally a purifier, and destroys the whole army of household pests, such as bugs, spiders, moths, slugs, and flies, that are equally tormenting and disgusting.—*Am. Agriculturist.*

To take Spots from Leather Gloves.—Suspend them in a jar over the strongest liquid ammonia, (hartshorn). The fumes alone will remove the spots; be very careful not to let the liquid touch the gloves, or it will leave a mark even more unsightly than the spot it has removed.—*Am. Agriculturist.*

Memorial from Agriculturists.

[The Farmers' Library for December contains the following Memorial, which, it states, is in course of circulation through the country. The object aimed at is certainly one of high utility, and we see no reasonable objection to devoting a small portion of the public domain to the purpose contemplated. Success, then, to the effort.]

Memorial from the Agriculturists of the United States to their respective State Legislatures.

The undersigned, on behalf of the agricultural interest, to which they belong, beg leave to request your attention to what they feel to be their just, but too long neglected claim on the General Government.

Not wishing to deal in vague generalities, the measure we solicit, is that you would urge our Representatives and Senators in Congress, to use their influence to *procure an appropriation from the proceeds of the public lands, or from the general treasure, for the use of each State, in proportion to its representation in Congress, to be applied, in each State, expressly to the establishment of a* NORMAL SCHOOL, *for the instruction and preparation of teachers in agricultural chemistry, mineralogy, vegetable and animal physiology, civil engineering, rural architecture, and practical surveying*—in such arts and sciences, in a word, as will enlighten practical agriculture, and render more efficient and profitable the capital and labor employed in it. Teachers thus prepared, would be ready to take charge of minor agricultural schools, in each county in every State of the Union; and thus would the foundation be laid for spreading among the mass of the people a knowledge of those sciences, on the application of which, according to the opinion of the ablest writers of the age, "Agriculture must hereafter depend for all material improvements."

In the name of justice to the landed interest, and in anticipation of objections as to *want of means or power*, the undersigned would refer to the very large expenditures under all administrations, not only for the establishment of naval and military academies and schools, and the publication of surveys, maps, and journals, without number, of military officers, exploring sea and land, but to the boundless acquisition of foreign territory, by acts of Congress. We may also refer to large and repeated appropriations, not merely for the establishment of Observatories, and lines of Telegraph, under the control of the General Government, but to an object strictly analogous to the one we seek, to wit, the *annual Agricultural Reports from the Patent-Office.*

All these appropriations of the public money—chiefly, it is true, as connected with the military operations of the Government—have been avowedly for the purpose of collecting and distributing warlike or other information.

These facts and considerations induce your memorialists to hope that Congress will not now refuse to the people a portion of their own money, for the purpose of providing within each State, conformably with its own policy, institutions and courses of industry, schools for the instruction, also, of the *rising generation of planters and farmers* in the *principles* of that great pursuit which has been well pronounced "the nursing mother of *all the arts*,"—a pursuit upon which Congressional Reports, useful though they be in their way, can yet throw but the partial light of facts and statements promiscuously gathered up, not always well digested, and, after all, distributed or not, according to the individual pleasure and discretion of members of Congress.

For the warlike machinery and purposes of this Republican Government, embracing the objects above referred to, *several hundred millions* of dollars have been expended since our last war with a trans-Atlantic power; and this enormous expenditure has really been collected, in *very large proportion*, from the landed interest, since it is that class which has chiefly consumed the imports on which the revenue has been levied.

Your memorialists are far from repining at the liberal pay, life commissions, certain promotion, pensions, residences, hospitals, schools and academies built, provided, and kept up, at the public expense, for the two military branches of the Government; but they humbly think that the time has arrived when the people, the yeomanry of the country—those by whose toil its solid wealth is dug out of the ground—may inquire why, in what view of the "general welfare," it is that since any amount can be found to promote advancement in the science, and successful practice in the art of war, nothing can be granted for the better instruction of the rising generation of freemen in the science and practice of that great peaceful pursuit which employs, feeds, and pays all others?

Under the most despotic monarchies, men of genius who have conferred signal benefits on the industrial pursuits of the people, by scientific discoveries and useful inventions, have been lavishly rewarded, and raised to the highest honors. Mechanics, chemists, astronomers, great naturalists, and learned and enterprising men in every walk of civil life, have been there endowed with titles and fortune. If, under such Governments, stars and garters, and badges of power and respect, have stimulated to heroic deeds in fields of battle, so have they been held up as certain prizes to intellectual excellence, and great accomplishments in the arts and employments of peaceful industry. If schools have there been maintained for training youth in the art of war, so have they been maintained for teaching the application of the arts and sciences to all the industrial pursuits of life.

As republican freeholders, then, we would respectfully inquire whether it be becoming or politic for this nation, whose Government rests for security on the popular intelligence, to imitate European Governments *only* in the favor and patronage they confer, with self-preserving instinct, on that executive department of their power upon which *they* lean to protect their existence against the progress of free principles, and the force of public opinion seeking to carry them out?

It would indeed be passing strange, as it seems to your memorialists, that in a Government called free, deriving so chiefly all its resources from the agricultural interest, its powers should be so organized as to preclude the application of any portion of the public treasure to confessedly, and by

far, the greatest of all public concerns! We would respectfully forbear from remarking, as it would seem to deserve, on that monstrous perversion and abuse of sovereign authority, in a Government called republican, which should reserve all life tenures, and all pensions, and all enlightenment, for the military, while it renounces the glorious faculty of aiding and rewarding the labors of intellect in the humbler, but so much more useful paths of peaceful, laborious and productive industry!

In behalf, then, not so much of themselves, as of the rising generation of agriculturists, on whom our country and its liberties must mainly depend under all vicissitudes, we call upon you, to whom we have consigned for the time the sovereign authority of the State, to demand from the General Government that something be now, at last, done to *foster Agriculture*, by diffusing that knowledge which is power, no less in the field of labor than of blood. They believe they have a right to expect for this great national purpose, so identical with the general welfare, appropriations bearing some proportion to the amount which the products of agriculture bear to the aggregate wealth of the nation, and to the degree of dependence of the Government itself, and all classes under it, on that class for employment, protection, safety, and support.

Ammonia.

To the Editor of the Maine Farmer:

Dear Sir—Now that the evenings are long and the grain mostly threshed, we may expect to hear from many farmers of those who have the past season tested the efficacy of ammonia on seed grain. We thank you, Doctor, for reminding us of our duty. My success with that chemical stimulant has been so partial that I have wished to defer the report till I had heard from others; but having waited till others beside myself have become impatient with the delay, such as I have I now give you.

My first experiment for the season was with a bushel of oats. I steeped fifty-two hours in a liquid made with one pound of carbonate of ammonia and one pint of gypsum in six gallons of water, and sowed on the 9th of May. And for this experiment I have only to add, that not one grain ever sprouted. My next trial was with four bushels of wheat, soaked in the same manner as the oats—a part remaining in the steep fourteen hours, and the remainder continued eighteen hours. I sowed on the 22d of May, one bushel to the acre, in three small lots, the tillage varying from the best to the worst—and sowed on the corner of each lot a few quarts of dry wheat. Soaked a bushel of oats six hours in the liquid remaining after soaking the wheat, and sowed on the same ground sowed on the 9th. Then carried the wash still remaining to the potatoe field, and put it on the seed when dropped, a half pint to a hill. We saw no more of it, nor its effects. The oats last sowed came up much stronger and yielded better than the balance of the field sowed earlier with dry seed. A part of the apparent difference should be credited to the extra harrowing. The difference in each piece of wheat was distinctly marked between the dry seed and the steeped. Though the difference was less than in that of my similar experiment of last year. We threshed a part of the wheat at the harvest, and it produced thirteen from one—which, considering the state of the ground, was a great crop. The best is not yet threshed. A great number of farmers in this county have tried the *pound manure* the past season, and with a result that is a caution for children not to play with fire. Some from not remembering to use the gypsum, and others not having the knowledge or *faith* in the saving efficacy of such a chemical combination, dissolved the carbonate alone in water, and in many or in all the cases to the destruction of the seed.

Now it is of *some importance* to the State that the results of this whole business should be collected and weighed. Not that volumes need be written upon it, but that the *facts* should so accumulate in the *Doctor's* office, that good may be gleaned from it.

I have full faith that great advantages will result from the use of the stimulant when its nature and power are better understood, and when experiment shall have marked the line of safety.

Do we not fail by using too small a quantity of gypsum? Has not that the power to neutralize the caustic property of the ammonia when taken in proper proportion? Has any one used two quarts of gypsum to one pound of ammonia?

When all the light is developed, and we conclude to carry the matter into the next campaign, I hope *our craft* will practice their nine-penny worth of wisdom, and not all try to buy their ammonia at seed time, as we dislike of all things to see so small a game played as putting the article up fifty per cent. at the starting of one screw.

Yours, very sincerely, C. C.

Foxcroft, Nov. 2d, '46.

To prevent the corrosion of metals.—The best means of preventing the corrosion of metals is to dip the articles into very dilute nitric acid, and afterwards to immerse them in linseed oil, allowing the superfluity of oil to drain off; they are by this means very effectively preserved from rust or oxidation.

A Watch which marks the degree of heat and moisture, in addition to the keeping of time, has recently been invented in France.

From the Ohio Cultivator.

Cure of Murrain in Cattle.

MR. BATEHAM:—

The bloody murrain is a disease that so frequently prevails, with fatal results, among cattle in this part of Ohio, that I have thought proper to detail a course of successful treatment, practised recently on a favorite ox. I will premise that the characteristics of murrain in this case, were as clearly developed as any I ever saw in my experience of thirty-eight years in this region of country, where this destructive malady has always been a severe scourge to dealers in cattle.

On the morning of the 5th of Dec., inst., one of my oxen was lying down, and when my son went to feed the cattle, he reported to me that he thought the ox was not well. I immediately went to him and found him disinclined to get up or walk, and he would not eat, and driving him about I soon heard him grunt; his nose was dry, with twitching in his neck and flanks. We immediately procured one pound of glauber salts, dissolved and mixed with about a half gill of spirits turpentine, and drenched him with it; we then put him into a field adjoining and in sight of where we were at work, and occasionally I went myself to examine and drive him about the field, but he evidently grew worse through the day. About sun down we drove the ox into the yard, and (as his physic had not operated) gave him another pound of salts with turpentine in the morning. The blood by this time flowed freely in his urine, and he was so feeble that we all thought he would die before morning; so we drove him off near half a mile to save the trouble of hauling off his carcass. On the next morning, to our astonishment, the ox appeared better; his physic was operating and he appeared free from pain, and would eat a little. We drove him to the yard again, and at 10 o'clock drenched with half pound of alum to stop the blood. His appetite increased, but the blood continued to flow, until 12 o'clock the following day, (the 7th) when we drenched with a strong decoction of soot, in which was dissolved a half pint of table salt; we then gave no more medicine, but kept the ox in the yard where we could see him at any time. On the 8th the ox appeared to have a good appetite; his bowels were regular, the blood had stopped flowing, he chewed his cud and looked bright about the eyes. On the 9th, the ox appeared perfectly free from disease and was turned out with the other cattle.

D. GREGORY.

Berkshire, Del. Co., O., Dec. 15, 1846.

COLOR FROM ST. JOHN'S WORT.—The flowers and tops of this plant contain a juice soluble in water, spirits of wine, or vinegar. With the first two liquids it forms a red color, resembling blood, and the latter a splendid crimson; when alum and a portion of potash are added to a strong solution of juice in water, it becomes a permanent yellow dye for cloth, cotton, paper, &c.—*Am. Agriculturist.*

From the Boston Cultivator.

Making Manure.

MESSRS. EDITORS:—

Some time since I was conversing with an old farmer, worth some three thousand dollars, respecting improving the soil by increasing the quantity of manure. Said he—looking at me gravely—"These new modes of farming require *capital;* they are too expensive for farmers generally to adopt." This same man planted last year ten acres with corn and raised about two hundred bushels.

Now suppose the expense of ploughing and cultivating six acres had been laid out judiciously in making manure, and the whole had been put upon the remaining four acres, who doubts that he would have raised as much corn as he did on the whole, besides leaving the land in a far better condition for the next crop? It is not so expensive making compost manure as many imagine. Some wealthy men will expend several hundred dollars a year for this purpose, and the sound frightens others from attempting anything.

But every farmer may at least *double* his quantity in the yard, hog-pen, sink-drain, &c. I have practiced composting all, or nearly all my manure, with good effect.

I have not followed the exact rules of the chemist, but my own judgment; and if my plan is not the best, it is at least better than none, and it requires no capital but a farm. I collect all the material I can for litter, which becomes mixed with the dung during the winter. I have no barn cellar, but I save the liquid by having my stable floors made tight, and a little inclined, and keeping them covered behind the cattle with some good absorbent, which is renewed as often as necessary.

I have a swamp which furnishes an inexhaustible supply of peat and mud. After supplying the yard, &c., with this, I collect a long heap near the barn in the Fall, to be pulverized by the frosts of winter. Early in the Spring I draw out the manure from the stables, and drop it beside the muck heap about two feet in the depth, and cover it with the latter, sometimes making two or three alternating layers, and mixing lime or ashes, if I have them. An active fermentation will soon take place, after which I shovel the whole over, mixing it well together, and cover it again with muck. A slight fermentation then takes place, and the whole is converted into fine, strong manure, much better for grass or for

any crop on a light dry soil, than clear stable manure. CHARLES.

December, 1846.

Defective Stables.

One of the greatest defects still existing throughout the country, in the farmer's stables, is the want of tight floors, and a channel in them for the purpose of carrying off the urine of the stock into tanks for its preservation, to be applied at a future day to the grass and clover crops. We advise all who have not their stables thus formed, to remedy the defect as soon as possible; and those who cannot immediately do this, should litter their stock well. The litter will absorb and preserve nearly all the urine, especially if it be whitened every day with a sprinkling of plaster of Paris. If plaster cannot be had, charcoal dust is next best, then peat, tan bark, or indeed most any dry absorbing vegetable substance.

The average stale of a cow is from 900 to 1,200 gallons a year, according to size; that of the horse 1,100 to 1,400. Pound for pound, this liquid is much more valuable than solid manure.

The Chinese and Flemings save and apply all animal liquids with the utmost care. They would as soon let their silver coins be lost as this precious fluid; and they are the best farmers in the world. The Germans, French, and English are now rapidly following in their footsteps. Millions of dollars' worth of manure are annually thrown away, or suffered to waste throughout the United States. When shall we become as economical in saving, and as enlightened in applying these enriching substances as our transatlantic brethren?—*Am. Agriculturist.*

HOW TO RESTORE FROZEN PLANTS.—If you have ever had the misfortune to find your parlor window favorites frozen stiff when you paid your devoirs to them in the morning, you will appreciate and thank an unknown friend for the following recipe for preserving tender plants from the effects of frost; and restoring them after they have been frozen. Before you allow them to feel the effects of fire—plunge the whole, or as much of the frozen plant as is practicable, into cold water, and keep it under until it has thawed, which will easily be known by its becoming flaccid—then place it where it will warm gradually, as sudden heat will cause it to die. So treated, the most hardy will recover immediately—others will lose their leaves, or even die down to the ground—and some are so tender that the slightest frost will kill them; but generally they will put forth with fresh vigor after a season of rest, and gratefully repay your care. Water sparingly, until the leaf-buds are well grown, increasing the quantity when they expand.—*Am. Agriculturist.*

FROZEN MEAT.—If frozen meat is brought into a warm room, and thawed by *heat*—if you have not good teeth, and the digestive powers of an ostrich, you had best leave that part of the dinner for those who have. Therefore, bring from the larder, the night before it is wanted, the meat or poultry intended for dinner, and plunge it into cold water. The next morning, a thick coating of ice will be found encrusting the whole piece. Take it off, and change the water, and let it remain until the hour for dressing it. If to be boiled, put it over the fire in cold water—if for a roast, put it not before too brisk a fire, as there is always danger that the heart of a large piece may not be completely thawed, in which case it will be spoiled.

Vegetables should be thawed in the same way, and, with few exceptions, they will be better for having been frozen. Potatoes, however, acquire a disagreeable sweetness.—*Am. Agriculturist.*

A GOOD TEMPORARY PLAN FOR SMOKING MEAT.—Dig a hole in the ground 15 inches deep, and a foot, or thereabouts, in diameter, in which to place the fire; cover it with a piece of sheet iron. From this hole dig a small trench, one half as deep and five or six feet long, and cover tight with bricks or flat stones and dirt. Over the end of this trench which is farthest from the fire, place a hogshead with both heads out, in which suspend your hams, cover not very tight, and start your fire. The smoke will be cooled in its passage to the hogshead, whereby the meat will be made of better flavor, while the fire is easily tended and perfectly safe. Some who have brick smoke houses, build the fire outside, and conduct the smoke in through a trench, as indicated above.

TO REMOVE DUST OR MOTES FROM THE EYE.—Farmers, as well as many other persons, are often so exposed in their labors as to get dust or motes in their eyes, and frequently suffer considerably before they can find any means of relief. The following simple remedy is almost always near at hand, and in most cases will prove effectual:—Fill a cup or goblet with clear cold water, quite to the brim, and place the eye in distress in such a position as to be completely within the water in the cup; then rapidly open and shut the eye a few times, and the dust or mote will be immediately washed away. If a cup or other vessel be not at hand, the eye may be placed in a spring or bucket of water.—*Agriculturist.*

For the Michigan Farmer.

Marshes--Inquiry.

MR. HURLBUT:

If you or any of your correspondents know what is the best way to proceed with a marsh which has been drained, I should be glad to be informed:—whether it would be proper and profitable to plow it up in the spring and sow it to oats, or what would be best to do.

JOHN WHITTON.

Jonesville, Hillsdale Co., Jan. 28th, 1847.

[We hope the above inquiry will receive an answer from some one who has drained and cultivated or stocked down one of our marsh meadows, or seen it done. It is a subject on which the state needs information. If no better can be done, we will give, before long, what facts we have been able to pick up in our conversations with farmers.]

Swine--Shall they run at large.

MESSRS. EDITORS:—The trials and vexations arising from a hungry herd of lean, half starved, squealing (I was going to say porkers, but they look as little like porkers as any thing else,) has induced me to try to stir up the pure minds of you and your correspondents by way of remembrance to the stern necessity of *doing* something at least to mitigate the evil of being run over by hogs, as we have too long submitted to be done, and that too in districts of country where they can get little or nothing by "running out" except what they steal from their owner or his neighbors.

There is no doubt but as a general thing the cost in damages and annual fixtures, to say nothing of the wear and tear of patience, submitted to in letting hogs run at large in this prairie country, would *twice* pay for raising and fattening, in a state of confinement, by a judicious course, all the pork now raised in the country, especially in those parts not immediately contiguous to some considerable grove of timber; then the neighborhood quarrels and vexations law suits that would be escaped are enough to set every friend of peace and good order to thinking, if not to *acting*.

With reference to this subject, let me ask a few questions. Can a pasture of four acres of clover, divided into two lots, be made to sustain and fatten 25 hogs of medium size from May till August? Can the same quantity of land, divided the same, be made to keep the same hogs and fatten them, from August to December, by being planted to some root, say Jerusalem artichoke? Can store hogs be wintered on roots at half that it would cost on corn?—*Prairie Farmer.*

Wet lands should be well drained before they are manured. Ashes and lime are appropriate manures.

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